

**Before the
Federal Communications Commission
Washington, D.C. 20554**

In the Matter of)	
)	
Second Periodic Review of the)	MB Docket No. 03-15
Commission's Rules and Policies)	
Affecting the Conversion)	RM 9832
To Digital Television)	
)	
Public Interest Obligations of TV)	MM Docket No. 99-360
Broadcast Licensees)	
)	
Children's Television Obligations of)	MM Docket 00-67
Digital Television Broadcasters)	
)	
Standardized and Enhanced)	MM Docket No. 00-168
Disclosure Requirements for)	
Television Broadcast Licensee)	
Public Interest Obligations)	



COMMENTS

I. INTRODUCTION AND SUMMARY

The American Cable Association (“ACA”) and its members have consistently supported the Commission’s efforts to advance the DTV transition, and we will continue to do so. ACA members are at the forefront in delivering advanced services, like cable modem service and digital cable service, to smaller markets. Within the past six months, several ACA member systems have begun to deliver DTV signals as well. Many more ACA members are actively exploring and planning how to deliver DTV signals in their markets.

At the same time, ACA members fear the consequences if the DTV transition is forced upon their businesses and their customers prematurely. In short, the Commission's DTV transition regulations must accommodate the unique circumstances and higher cost structures of smaller systems. If not, hundreds of smaller cable systems and hundreds of thousands, *even millions*, of smaller market consumers could lose access to local broadcast signals.

To assist the Commission in evaluating the DTV transition in smaller markets, ACA recently surveyed its members. The survey results identify four principal obstacles:

- **Costs.** To deliver DTV signals, small systems must fund the same equipment costs as much larger systems. The current costs of DTV headend equipment and set-top boxes will impose an impossible financial hardship on many small systems.
- **Lack of bandwidth.** ACA member systems have less channel capacity than many larger systems, limiting the ability to carry some DTV signals along with a full analog complement. Retransmission consent tying arrangements are a major bandwidth constraint.
- **Lack of availability.** Broadcasters declining to deliver a good quality signal to many smaller communities.
- **Low adoption rates.** Current adoption rates of DTV products in smaller markets are extremely low.

This information underscores that a successful DTV transition in smaller markets will require a combination of inter-industry cooperation and careful Commission oversight. Otherwise, the "promise" of digital broadcast television could mean a nation of urban "DTV-haves" and rural "DTV-have nots".

The American Cable Association. ACA represents more than 1,000 independent cable companies that serve about 7.5 million cable subscribers, primarily in

smaller markets and rural areas. ACA member systems are located in all 50 states and in virtually every congressional district. The companies range from family-run cable businesses serving a single town to multiple system operators with small systems that focus on small markets. About half of ACA's members serve fewer than 1,000 subscribers. All ACA members face the challenges of developing and operating broadband networks in lower density markets, including the challenges of the DTV transition.

II. THE STATUS OF THE DTV TRANSITION IN SMALLER MARKETS – PROGRESS AND OBSTACLES.

A. ACA members have made substantial progress in delivering advanced services in smaller markets.

ACA members continue to lead the industry in delivering advanced services to smaller market consumers and business. Far from languishing on the wrong side of a "Digital Divide", many customers served by many ACA members enjoy access to advanced services. ACA estimates that more than 90% of ACA member systems have launched or plan to launch digital cable services. Using innovative services such as Comcast's Headend-in-the-Sky, most ACA members have launched digital cable services without the costs of a full-blown system upgrade. ACA members have made similar progress in deploying cable modem services. ACA projects that up to 65% of the homes passed by ACA members now, or soon will, have access to cable modem services.¹

¹ *In the Matter of Inquiry Concerning High-Speed Access to the Internet Over Cable and Other Facilities*, GN Docket No. 00-185, Reply Comments of ACA (filed Dec. 1, 2000).

Within the last six months, some ACA member systems have begun to offer HDTV services as well. Companies like Armstrong Utilities, Inc. and Blue Ridge Cable report offering HDTV services in selected markets.

This impressive progress reflects one hallmark of success for smaller cable businesses – innovative development of marketplace solutions. The DTV transition can progress similarly in smaller markets. At the same time, ACA members fear a “one-size-fits-all” transition mandate, one that fails to accommodate the unique circumstances and cost structures of serving lower density markets. The following sections summarize the results of the ACA member survey concerning the obstacles ACA members face in transitioning to DTV.

B. ACA members face four principal obstacles to completing the DTV transition in smaller markets.

ACA surveyed its members to provide the Commission with “real world, real time” input on the DTV transition in smaller markets. The responses cover about 110 cable systems serving over 750,000 customers in 20 states. Member responses were remarkably uniform and revealed four major obstacles to the DTV transition for smaller systems: (1) cost; (2) lack of bandwidth; (3) lack of DTV signals; and (4) low DTV adoption rates. We discuss each item below.

1. The current cost of the DTV headend equipment and set-top boxes will impose a severe financial hardship on many small systems.

Nearly every respondent used one word to describe the greatest obstacle to converting small cable systems to DTV – cost:

“The cost of the equipment would be very high for us because we are so small.”

“[The] cost to upgrade [is] too high for the number of subs.”

“The number of the subscribers per headend cannot justify the equipment cost.”

“The investment to convert to digital would take a very long time to pay back, if ever.”

“The high cost of upgrading equipment to receive and process HDTV format signaling in relation to the number of customers requesting the service – zero.”

“Market will not support cost.”

“[We] do not have capital for...equipment and boxes.”

For many smaller systems, the current cost of the headend equipment and set-top boxes necessary for a complete conversion to DTV would impose an impossible financial hardship. The Commission has ample evidence of this - nearly 2000 of these systems have recently received temporary financial hardship relief from EAS compliance costs.² More importantly here - the costs of converting a small system to DTV will far surpass the costs of EAS equipment.

Based on information received from ACA members, converting one broadcast channel from analog to DTV costs between \$2,500 - \$3,500, just to pass through the signal. This includes the costs of a new antenna, modulator, and processor, plus labor for installation, testing, and adjustment. Moreover, for multiplexed DTV signals, cable operators must install a remultiplexer or “cherry-picker”, a device that processes multiplexed signals so that the discrete signals can be cablecast. Remultiplexers reportedly cost \$17,000 and up.

² Within the past year, the Enforcement Bureau has granted temporary EAS waivers for nearly 2,000 small cable systems due to the financial hardship of installing EAS equipment in each small headend. That equipment would cost between \$7,500 and \$10,000 per headend.

As a result, for a small cable system carrying eight local broadcast signals, conversion of all channels could cost \$20,000 to \$50,000. This is two to five times greater than the costs of EAS compliance. Moreover, many small cable systems carry more than eight local broadcast stations, particularly those on the edge of major markets. For example, small cable systems on the fringes of markets like San Francisco or Los Angeles will need to convert at least twice as many channels.

In addition to headend costs, small cable operators will need to buy or retrofit set-top boxes. Current digital set-top boxes cost between \$250 and \$450. Even at the low end of this range, for a 1,000 subscriber cable system to provide each subscriber a set-top box to process DTV signals, that system would need to invest up to an additional \$250,000. Again, the Commission's EAS waiver dockets contain ample evidence of the financial hardship this would impose on smaller cable systems.

If these compliance costs are imposed on the small cable sector, in the words of one operator, "CATV is history by 2007." Obviously the DTV transition cannot advance in smaller markets if the costs of that transition shut down a main source of DTV signals – small cable operators. The Commission must consider the disproportionate cost of the transition as it continues to guide the DTV transition.

2. Most smaller systems lack the bandwidth to carry DTV signals.

Small cable operators are especially threatened by broadcasters' continuing call for mandated dual must-carry. Many small systems are channel-locked. Access to capital for upgrades is extremely limited in current markets. Retransmission consent tying arrangements lock up what little bandwidth is available even on upgraded

systems. As reported by ACA members, these factors combine to present a significant obstacle to their ability to transition to DTV:

“Bandwidth. [R]etransmission consent contracts state ‘if one HDTV channel is added all must be carried.’”

“Bandwidth. Due to ...retransmission consent [requirements] I am forced to carry channels I do not need or want and I do not have any room left on my systems for more channels.”

“Basically, retrans[mission] agreements make digital carriage impossible for bandwidth constrained cable systems...”

“Lack of channel capacity and the retransmission consent agreements that require us to carry their channel if we carry any.”

“...the bandwidth needed to offer both digital and analog for those who are unable to receive digital.”

“We have a small system and our headend is at capacity with analog equipment.”

“Currently no bandwidth to deliver DTV to customers...”

“...we do not have enough channel capacity to carry both the digital and analog signals...”

ACA has asked the Commission to address retransmission tying arrangements and abuse of the retransmission consent process by media conglomerates.³ Relief in this area will help alleviate the capacity constraint in some small systems and make more capacity available for DTV signals.

3. DTV signals are unavailable in many smaller markets.

ACA members report a third major obstacle to delivering DTV signals – the signals are not available. Broadcasters are moving far more slowly in launching DTV

³ See *Petition for Inquiry into Retransmission Consent Practices*, American Cable Association (filed Oct. 1, 2002); *Petition for Inquiry into Retransmission Consent Practices, First Supplement*, American Cable Association (filed Dec. 9, 2002); *In the Matter of 2002 Biennial Review of the*

services in smaller markets. Even when they do, often the signal is at reduced power and does not reach cable systems serving smaller communities. Some small systems require translator stations and microwave relays to receive analog broadcast signals. Broadcasters reportedly are taking no steps to extend their DTV signal through these means. ACA members describe the situation in their markets as follows:

“Only one broadcaster in our market is airing digital signals.”

“A very limited number of broadcasters are using digital.”

“There are no local or regional stations in our area broadcasting digital signals.”

“Some broadcasters will not allow us to convert their digital signals. They don’t want to lose the ad revenue.”

“In some smaller markets, the stations are not yet transmitting a digital signal. In the larger markets where there are digital signals being transmitted, we do not have enough channel capacity to carry both the digital and analog signals. Also there is the added cost at the headend as well as the receivers for customers.”

“We are located in a mountain valley and the off-air broadcast signals are not capable of reaching our area without going through translation. The local broadcasters do not have digital translators in place to deliver their signal to us.”

Members also report that the lack of DTV signals will be aggravated by the “digital cliff effect.” “Digital cliff” is the characteristic of digital broadcast signals to provide a very good quality signal down to a certain signal strength, after which the receiver loses sufficient data to provide a picture. The screen then “tiles” and goes blank. In contrast, analog signals diminished by distance or terrain can still be cablecast or received by a television, albeit at a lower signal quality.

Compounding the digital cliff effect is broadcasters' refusal to extend DTV signals to more remote headends. If a broadcaster chooses to only service Grade A and B contours, small, rural consumers on the fringe of those markets risk losing broadcast signals once the transition occurs.

If the Commission's rules do not take into account small systems' disproportionate lack of DTV signal availability, an entire class of small systems and hundreds of thousands of cable subscribers will lose all access to local broadcast signals, either by cable systems or over-the-air antennas. This problem is particularly acute in smaller and economically disadvantaged areas. Absent a genuine obligation to serve the public interest of all consumers, broadcasters have little incentive to extend their signals to these areas. If not addressed by the Commission, this problem threatens a nation of urban "DTV-haves" and rural "DTV-have nots." This result would fall far short of the important government interest of "promoting the widespread dissemination of information from a multiplicity of sources" via local broadcast television.⁴

4. DTV product adoption rates in smaller communities are extremely low.

The final major obstacle facing is the extremely low adoption rates of DTV products in smaller communities:

"5 or less [of our 6,100 subscribers]."

"Less than 5% have the ability to receive HDTV signals."

"Zero, to the best of my knowledge. Nor has anyone inquired about digital broadcast TV."

"Possibly 6 [of our 400 subscribers]."

⁴ *Turner Broadcasting Systems, Inc. v. FCC*, 520 U.S. 180, 189 (1997).

“I am not aware of any of our customers who have digital or HDTV capable sets.”

“To my knowledge, very few of our customers can receive HDTV signals.”

“A handful, if any.”

“Probably not many. We are a very small rural community.”

In part, this information may reflect the more limited disposable income of many smaller market consumers. The DTV transition will impose costs on all households, and not all households will be able to bear those costs at current DTV product prices. Again, forcing a DTV transition in these markets before the consumer is ready will exacerbate the problem of “DTV-haves” and “DTV-have nots”.

III. CONCLUSION AND PROPOSED SOLUTIONS

Facilitating the DTV transition in smaller markets will require a combination of inter-industry cooperation and careful regulatory oversight by the Commission.

Foremost, the Commission must continue to resist the call for “one-size-fits-all” regulations. Second, the Commission should address the following issues:

- The disproportionate cost of the DTV transition for smaller cable systems due to headend and set-top box costs.
- The disproportionate burden of dual must-carry for smaller cable systems due to more limited channel capacity.
- The unwillingness of some broadcasters to deliver an adequate quality DTV signals to outlying areas of their markets.
- The continuing abuse of retransmission consent of a handful of media conglomerates, which is constraining channel capacity, raising costs, and hampering small systems ability to develop solutions to DTV carriage.

With all available resources, ACA will assist the Commission in resolving these issues.

Respectfully submitted,

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